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[Continued on next page]

(54) Title: **USE SINGLE NUCLEOTIDE POLYMORPHISM IN THE CODING REGION OF THE PORCINE LEPTIN RECEPTOR GENE TO ENHANCE PORK PRODUCTION**

GCAC TGT TTT GAG CACT TGG AAA GTT AAA ATA ATT ATT TGT TGG AGA CTG CAT GTT TTA ATCT TAGA  
TACT TCCT ATTT ATG TCT TAGT CAAA ATG ATTA ATT GCT TTT CTAT GTG TCT TTT AAA ATG TCT CT  
AACA GAA TTT ATT TAT GTG ATA ACT GCA TTT GAC TTG  
E F I Y V I T A F D L

GCA TAT CCA ATT ACT CCT TGG AAA TTT AAG TTG TCT TGC ATG CCA  
A Y P I T P W K F K L S C M P

CCA AAT ACA ACA TAT GAC TTC CTC TTG CCT GCT GGA ATC TCA AAG  
P N T T Y D F L L P A G I S K

AAC ACT TCA ACT TTG AAT GGA CAT GAT GAG GCA GTT GTT GAA  
N T S T L N G H D E A V V E

A[T/C]G GAA CTT AAT [T/A][C/T]A AGT GGT ACC TAC TTA TCA AAC  
M/T E L N S/I S G T Y L S N

TTA TCT TCT AAA ACA ACT TTC CAC TGT TGC TTT TGG AGT GAG GAA  
L S S K T T F H C C F W S E E

GAT AAA AAC TGC TCT GTA CAT GCA GAC AAC ATT GCA GGG AAG G  
D K N C S V H A D N I A G K

(57) Abstract: The instant invention is drawn to the identification and use of information regarding one or more porcine leptin receptor (pLEPR) gene polymorphisms as a marker to identify animals to serve as breeding stock for enhanced pork production. One particular polymorphism of pLEPR gene results in either a methionine or a threonine amino acid residue at position 69 of the protein that the pLEPR genes encodes. The pLEPR gene is located on porcine chromosome 6 and have been shown to be associated with determination of daily feed intake, among other factors.

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